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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,755	11/03/2000	Manfred Tasto	P00,1814	3791

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EXAMINER

LI, SHI K

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 07/17/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,755

Applicant(s)

TASTO ET AL.

Examiner

Shi K. Li

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2000 and 29 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1, 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 39 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim recites the limitation of using a frequency of greater than 10 GHz in the power supply network. The Applicant fails to teach such technologies in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 depends on claim 19. While claim 19 recites the limitation that the cordless data transmission is via infrared radiation, claim 22 recites the limitation that the infrared radiation has a wavelength from 800 nm to 100 nm. Wavelength of 400 nm~800 nm is commonly known as visible light and wavelength below 400 nm is commonly known as ultraviolet. Therefore, it is unclear whether the radiation is infrared, visible light, or ultraviolet. Since Applicant mentioned

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range 800 nm to 1000 nm in page 2, line 21 of the specification, the following art rejection is based on the assumption that 100 nm reads 1000 nm.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 17-18, 29, 33-34 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Lueker et al. (U.S. Patent 6,130,896).

Lueker et al. discloses in FIG. 1 the general ideal of having multiple access points (cordless communication devices) being connected to a power supply network. Lueker et al. further discloses in FIG. 6A and col. 4, lines 59-62 the placement of access points in cells for communication with untethered devices.

Regarding claim 18, Lueker et al. suggests the use of RF for wireless communication.

Regarding claim 29, Lueker et al. suggests the use of powerlines found in homes for connecting the access points. These powerlines are inherently of 110 volt in the United States.

7. Claims 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hämmerling et al. (U.S. Patent 4,443,786).

Hämmerling et al. disclose in FIG. 1 a communication system where a plurality of fixed modules are connected via the power line and communicate to movable modules via infra-red rays.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hämmerling et al. (U.S. Patent 4,443,786) in view of Scifres (U.S. Patent 6,025,942).

Hämmerling et al. has been discussed above in regard to claims 17 and 19. Regarding claim 20, the difference between Hämmerling et al. and the claimed invention is that Hämmerling et al. does not specify the modulation technology used for the infrared rays. Scifres teaches in col. 2, lines 42 the use of amplitude modulation for adding the data to the infrared carrier. One of ordinary skill in the art would have been motivated to combine the teaching of Scifres with the communication system of Hämmerling et al. because amplitude modulation is simple to implement and easy to understand. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use amplitude modulation for adding data to the infrared carrier, as taught by Scifres, in the communication system of Hämmerling et al. because amplitude modulation is simple to implement and easy to understand.

Regarding claim 30, Scifres suggests in FIG. 2 to have the wireless modules in rooms.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hämmerling et al. (U.S. Patent 4,443,786) in view of Hortensius et al. (U.S. Patent 5,917,629).

Hämmerling et al. has been discussed above in regard to claims 17 and 19. The difference between Hämmerling et al. and the claimed invention is that Hämmerling et al. does not specify the modulation technologies. Hortensius et al. teaches in col. 3, lines 38-42 the use of OOK, FSK or PSK for modulating the infrared carrier in a wireless transmitter. These are digital modulation techniques suitable for data communication. One of ordinary skill in the art would have been motivated to combine the teaching of Hortensius et al. with the communication system of Hämmerling et al. because digital modulation techniques allow high speed data to be transmitted with minimal error. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use digital modulation, as taught by Hortensius et al., in the communication system of Hämmerling et al. because digital modulation techniques allow high speed data to be transmitted with minimal error.

11. Claims 22, with the assumption that "100 nm" reads "1000 nm", and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hämmerling et al. (U.S. Patent 4,443,786) in view of Sakanaka et al. (U.S. 5,680,241).

Hämmerling et al. has been discussed above in regard to claims 17 and 19. The difference between Hämmerling et al. and the claimed invention is that Hämmerling et al. does not specify the wavelengths used for the infrared carrier. Sakanaka et al. teaches the choice of various wavelengths depending on the transmission distance and safety consideration. One of ordinary skill in the art would have motivated to combine the teaching of Sakanaka et al. with the communication system of Hämmerling et al. because choosing the right wavelength gives

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maximal safety or transmission distance. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to choose of wavelength in the range of 800 nm~1000 nm or 1200 nm~1400 nm, as taught by Sakanaka et al., in the communication system of Hämmerling et al. because choosing the right wavelength gives maximal safety or transmission distance.

12. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hämmerling et al. (U.S. Patent 4,443,786) in view of Farber et al. (U.S. Patent 5,969,837).

Hämmerling et al. has been discussed above in regard to claims 17 and 19. The difference between Hämmerling et al. and the claimed invention is that Hämmerling et al. does not use a surface-emitting semiconductor laser as the light emitter. Farber et al. teaches in col. 4, lines 30-31 the use of surface-emitting laser as the light source for wireless communication. One of ordinary skill in the art would have motivated to combine the teaching of Farber et al. with the communication system of Hämmerling et al. because surface-emitting laser is inexpensive, easy to drive yet has high output power. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use surface-emitting laser as light source, as taught by Sakanaka et al., in the communication system of Hämmerling et al. because surface-emitting laser is inexpensive, easy to drive yet has high output power.

13. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. (U.S. Patent 6,130,896) in view of Propp et al. (U.S. Patent 5,774,526).

Lueker et al. has been discussed above in regard to claims 17-18, 29, 33-34 and 37. The difference between Lueker et al. and the claimed invention is that Lueker et al. does not include a controller. Propp et al. teaches in FIG. 2 the inclusion of a controller 202 in a power line

network. One of ordinary skill in the art would have been motivated to combine the teaching of Propp et al. with the communication system of Lueker et al. because a controller can be used to manage the network as described in col. 3, line 65-col.4, line 12. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a controller, as taught by Propp et al., in the communication system of Lueker et al. because a controller can be used to manage the network.

Regarding claims 26-28, Propp et al. teaches in col. 5, lines 48-50 the connection between the controller and an external network via cable, microwave, radio-wave or optical link.

14. Claims 31-32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. (U.S. Patent 6,130,896) in view of White et al. (U.S. Patent 6,400,968 B1).

Lueker et al. has been discussed above in regard to claims 17-18, 29, 33-34 and 37. The difference between Lueker et al. and the claimed invention is that Lueker et al. does not teach to screw the access points into incandescent bulk socket. White et al. teaches in FIG. 3A the screwing of a network module into an incandescent bulk socket. One of ordinary skill in the art would have been motivated to combine the teaching of White et al. with the communication system of Lueker et al. because by screwing into the bulk socket the module is connected to the powerline and mounted in a position for wireless communication. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to screw the access point module into an incandescent bulk socket, as taught by White et al., in the communication system of Lueker et al. because by screwing into the bulk socket the module is connected to the powerline and mounted in a position for wireless communication.

15. Claims 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. (U.S. Patent 6,130,896) in view of Hämmerling et al. (U.S. Patent 4,443,786).

Lueker et al. has been discussed above in regard to claims 17-18, 29, 33-34 and 37. The difference between Lueker et al. and the claimed invention is that the communication terminal of Lueker et al. does not operate at a frequency greater than 10 GHz or 100 GHz. Hämmerling et al. teaches that optical (infrared) carrier can be used for the wireless link. One of ordinary skill in the art would have been motivated to combine the teaching of Hämmerling et al. with the communication system of Lueker et al. because optical carrier provides wide bandwidth. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use optical carrier for the wireless link, as taught by Hämmerling et al., in the communication system of Lueker et al. because optical carrier provides wide bandwidth.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 703 305-4341. The examiner can normally be reached on Monday-Friday (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 703 305-4729. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9314 for regular communications and 703 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.


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July 13, 2003



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